Amendments to the Claims

Please amend the claims as follows:

1. (Currently amended) An encoder for compressing image information in the same pass using both predefined compression codes and compression codes defined during processing, comprising:

a memory configured to store a predefined compression code corresponding to one of white image data and black image data; and

a processor configured to receive image data including an input sequence of characters representing an image, to read a first character in the input sequence of characters, to determine whether the read first character corresponds to either one of ~~the~~ white image data and the black image data, and configured, upon a determination that the first character does not represent either of a white portion or a black portion of the image, to <u>read a character occurring immediately subsequent to the first character in the input</u> <u>sequence of characters to determine whether a compression code was already assigned to</u> <u>the first character and the subsequent character and if not to assign a compression code,</u> and to generate an output sequence of characters ~~representing the first character~~ comprising <u>the assigned</u> ~~a~~ compression code ~~defined during processing~~, and otherwise, upon a determination that the first character does represent one of white image data and black image data, to read one or more characters occurring immediately subsequent to the first character in the input sequence of characters to determine that the number of repeated subsequent read one or more characters that match the read first character, and to generate an output sequence of characters comprising a stored predefined compression code representing the one of the white image data and the black image data<u>, and further</u> <u>configured to repeat the processing of the received image data substituting the next</u> <u>subsequent character in the input sequence for the first character.</u>

2. (Canceled)

3. (Previously presented) An encoder according to claim 1, wherein:

the memory is further configured to store a threshold value; and

the processor is further configured to determine if the number of characters in the matching one or more characters is equal to or greater than the threshold value, and to generate the output sequence of characters comprising the predetermined compression code only if the corresponding value is equal to or greater than the stored threshold value, and to generate an output sequence of characters comprising a compression code defined during processing otherwise.

4. (Currently amended) An encoder according to claim 1, wherein:

the processor is further configured to generate the output ~~second~~ sequence of characters so as to include a value corresponding to the number of characters in the matching one or more characters.

5. (Currently amended) An encoder according to claim 1, wherein:

the output ~~second~~ sequence of characters has a predefined maximum bit length and further includes a continuation code.

6. (Canceled)

7. (Currently amended) A method for compressing image information in the same pass using both predefined compression codes and compression codes defined during processing, the method comprising:

reading a first character in an input sequence of characters representing an image;

determining whether the read first character represents either one of a white portion or a black portion of the image;

upon a determination that the first character does not represent either of a white portion or a black portion of the image, read a character occurring immediately subsequent to the first character in the input sequence of characters to determine whether a compression code was already assigned to the first character and the subsequent character and if not to assign a compression code, and to generate ~~representing the first~~

~~character with~~ an output sequence of characters comprising a compression code ~~defined during processing~~; and

upon a determination that the first character does represent one of a white portion and a black portion of the image,

reading characters occurring immediately subsequent to the first character in the sequence of characters to determine the number of repeated subsequent characters that match the read first character in the input sequence of characters; ~~and~~

representing the first character and the determined number of repeated subsequent characters with an output sequence of characters comprising a predefined compression code corresponding to the one of the white and the black portion of the image; and

<u>repeating the above steps substituting the next subsequent character in the input sequence for the first character.</u>

8. (Canceled)

9. (Previously presented) A method according to claim 7, further comprising, upon determining that the first character one of a white portion and a black portion of the image, after the reading step,

determining if the number of repeated subsequent characters is equal to or greater than a threshold value; and

wherein the matching one or more characters are represented by the output sequence of characters comprising the predetermined compression code only if the corresponding value is equal to or greater than the threshold value, and are otherwise represented by an output sequence of characters comprising a compression code defined during processing.

10. (Currently amended) A method according to claim 9, wherein the threshold value is defined prior to the reading of the first character of the <u>input</u> ~~first~~ sequence of characters.

11. (Currently amended) A method according to claim 7, wherein:

the output sequence of characters further includes a value corresponding to the number of characters in the matching one or more characters.

12. (Currently amended)   A method according to claim 7, wherein the output ~~second~~ sequence of characters has a predefined maximum bit length and further comprises a continuation code.

13. (Canceled)

14. (Currently amended) An imaging system comprising:

a raster image processor configured to receive a first sequence of characters representing an image and to convert the first sequence of characters into a second sequence of characters by reading a first character in a first sequence of characters, determining whether the read first character corresponds to either one of white image data and the black image data, and upon a determination that the first character does not represent either of a white portion or a black portion of the image, reading a character occurring immediately subsequent to the first character in the input sequence of characters to determine whether a compression code was already assigned to the first character and the subsequent character and if not to assign a compression code, and generating an output sequence of characters ~~representing the first character~~ comprising the assigned ~~a~~ compression code ~~defined during processing~~, and otherwise upon a determination that the first character does represent the one of white image data and black image data, reading one or more characters occurring immediately subsequent to the first character in the first sequence of characters to determine that the number of repeated subsequent characters that match the read first character and generating an output sequence of characters to represent the one of the white image data and the black image data comprising a predefined compression code representing the one of white image data and black image data and configured to repeat the above steps substituting the next subsequent character in the input sequence for the first character; and

an image controller configured to receive the output second sequence of characters representing the image and to convert the second sequence of characters into the first sequences of characters based on the predefined compression codes and the compression codes defined during processing.

15. (Canceled)

16. (Canceled)

17. (Currently amended) A system according to claim 14, wherein:

the raster image processor is further configured to determine if a value corresponding to the number of characters in the first sequence of characters is equal to or greater than a threshold value, and to generate the output second sequence of characters comprising the predetermined compression code only if the corresponding value is equal to or greater than the threshold value, and to generate an output sequence of characters comprising a compression code defined during processing otherwise.

18. (Currently amended) A system according to claim 14, wherein:

the raster image processor is further configured to generate the second output sequence of characters so as to include a value corresponding to the number of characters in the first sequence of characters.

19. (Canceled)

20. (Canceled)

21. (Currently amended) The method of claim 4 wherein the processor is further configured to generate the output second sequence of characters so as to include a multi-character value corresponding to the number of characters in the matching one or more characters, each character of the multi-character value comprising a continuation bit.

22. (Previously presented) The method of claim 9 wherein the step of representing the first character and the determined number of repeated subsequent characters further comprises representing the first character and the determined number of repeated subsequent characters with an output sequence of characters comprising a predefined compression code and a count, the count comprising a multi-byte value, each byte of the multi-byte value comprising a continuation bit.

23. (Cancelled)

24. (Cancelled)

25. (Cancelled)